09/646728

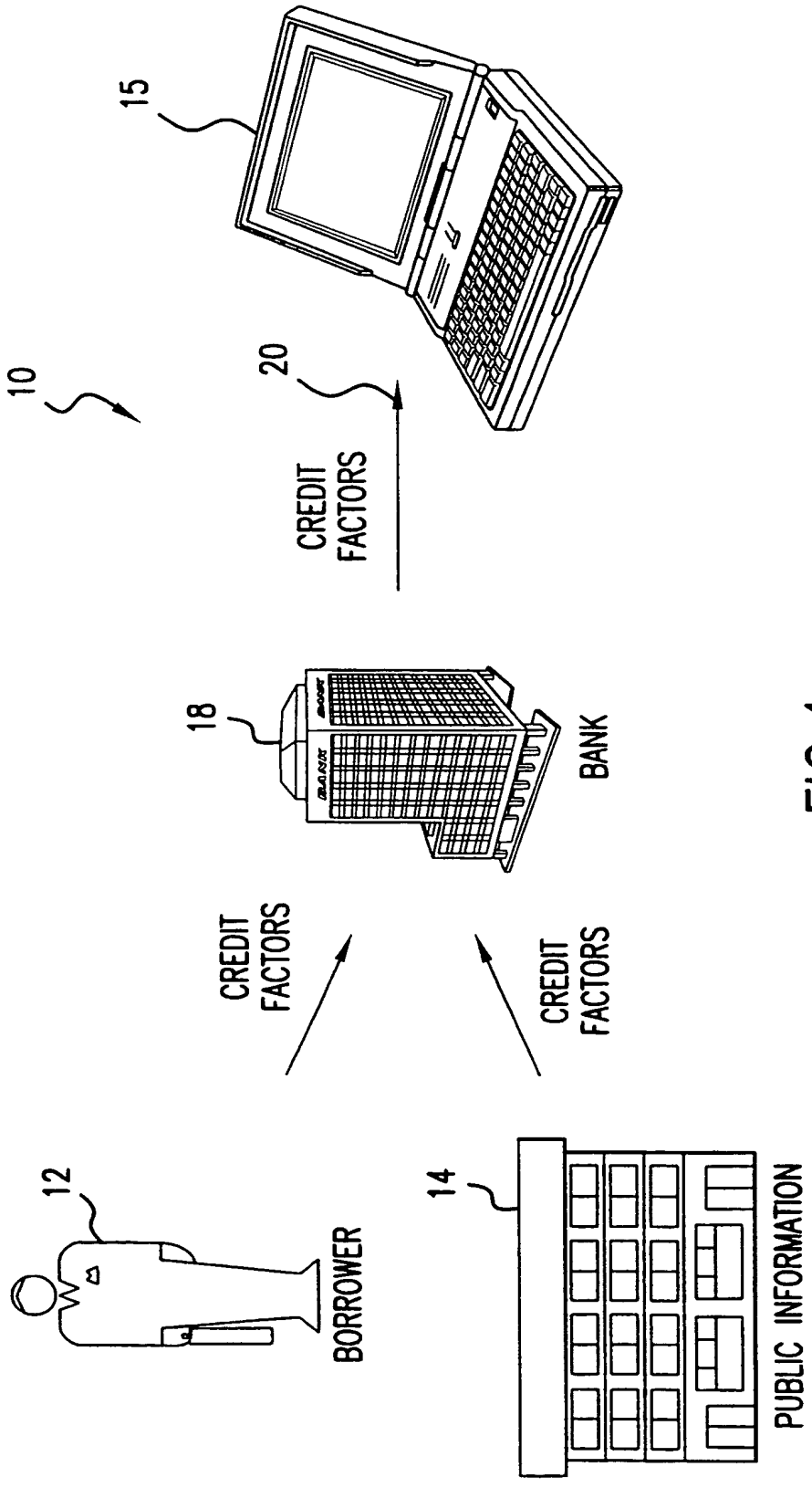
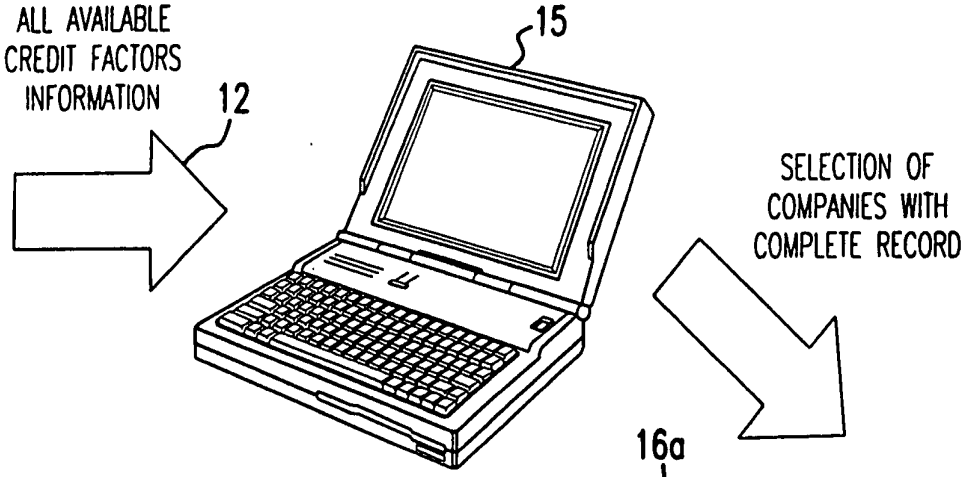


FIG. 1

SUBSTITUTE SHEET (RULE 26)

16-1	16-2	16-3						
COMPANY	1=DEFAULT 0=SUCCESS Y[1]	CREDIT FACTOR 1	CREDIT FACTOR 2	CREDIT FACTOR 3	CREDIT FACTOR 4	CREDIT FACTOR 5	CREDIT FACTOR 6	CREDIT FACTOR 7
		WEIGHT 1	WEIGHT 2	WEIGHT 3	WEIGHT 4	WEIGHT 5	WEIGHT 6	WEIGHT 7
1	1	0.12	0.31	0.44	1.21	0.02	0.07	0.38
2	0	0.20	0.52	0.54	1.27	0.03	0.07	0.78
3	1	(0.27)	0.08	0.76	1.32	(0.26)	0.02	0.27
4	1	0.15	0.52	0.54	1.27	0.03	(0.32)	0.78
5	0	0.02	0.38	0.20	0.78	0.02	0.02	0.25
6	0	0.03	0.42	0.23	0.83	0.04	0.00	0.27
7	1	(0.01)	0.37	0.16	0.63	(0.05)	0.04	0.21
8	1	0.01	0.39	0.18	0.63	0.02	(0.11)	0.23
9	0	0.02	0.38	0.20	0.78	0.09	(0.0)	0.25
10	0	0.05	0.42	0.22	0.82	(0.03)	0.00	0.30
11	0	0.02	0.35	0.17	0.73	0.02	0.08	0.24
12	0	0.02	0.38	0.20	0.79	0.02	0.00	0.25
13	0	0.06	0.53	0.32	0.50	0.07	0.06	0.41

FIG.2



16a

kkjlkjlj gg	kjljjlkjl kjlkjlk klj	kjlkjlkj lkjlkjkj kjl	kjkj	kjkj	kjk	kljlkj llk lkjkjl	kljlkj lkjlk kjlkl	klkjl kjljlj ljlljlj	kdkj kjkkj kj	kkjll kjljl
dkfjlsj	5	546545	546545	645646		5454	4654	6546	4654	5465
kjlkj;l	5	646554	646546	543545		.212	6546	5465	+612	4654
kjljdfkl	5	654654	546546	413465		131.	4646	4654	4655	5465
eruoieu	5	654654	546546	434684		1321	5465	6546	6465	4313
ksljdlk	5	654646	543521	564131		3465	4646	8743	4354	21.6
fjlslkjd	5	546546	216546	321654		4641	5465	2196	4564	1332
fllkjflk	5	465464	513216	346543		6516	3213	8741	3241	1665
jslksdjf	5	654654	846531	543543		4654	2132	6354	5665	4321
lkjsflks	5	646465	654321	132135		6464	1321	6835	4654	3213
jflkjsfl	5	465465	321321	432132		6546	3213	4219	6546	1313
kjslkjfl	5	465464	313213	131313		4654	1331	6854	5464	2121
skjflkjs	5	646464	132120	213321		6465	3133	1685	6555	6555

REFERENCE DATABASE

FIG.3

SUBSTITUTE SHEET (RULE 26)

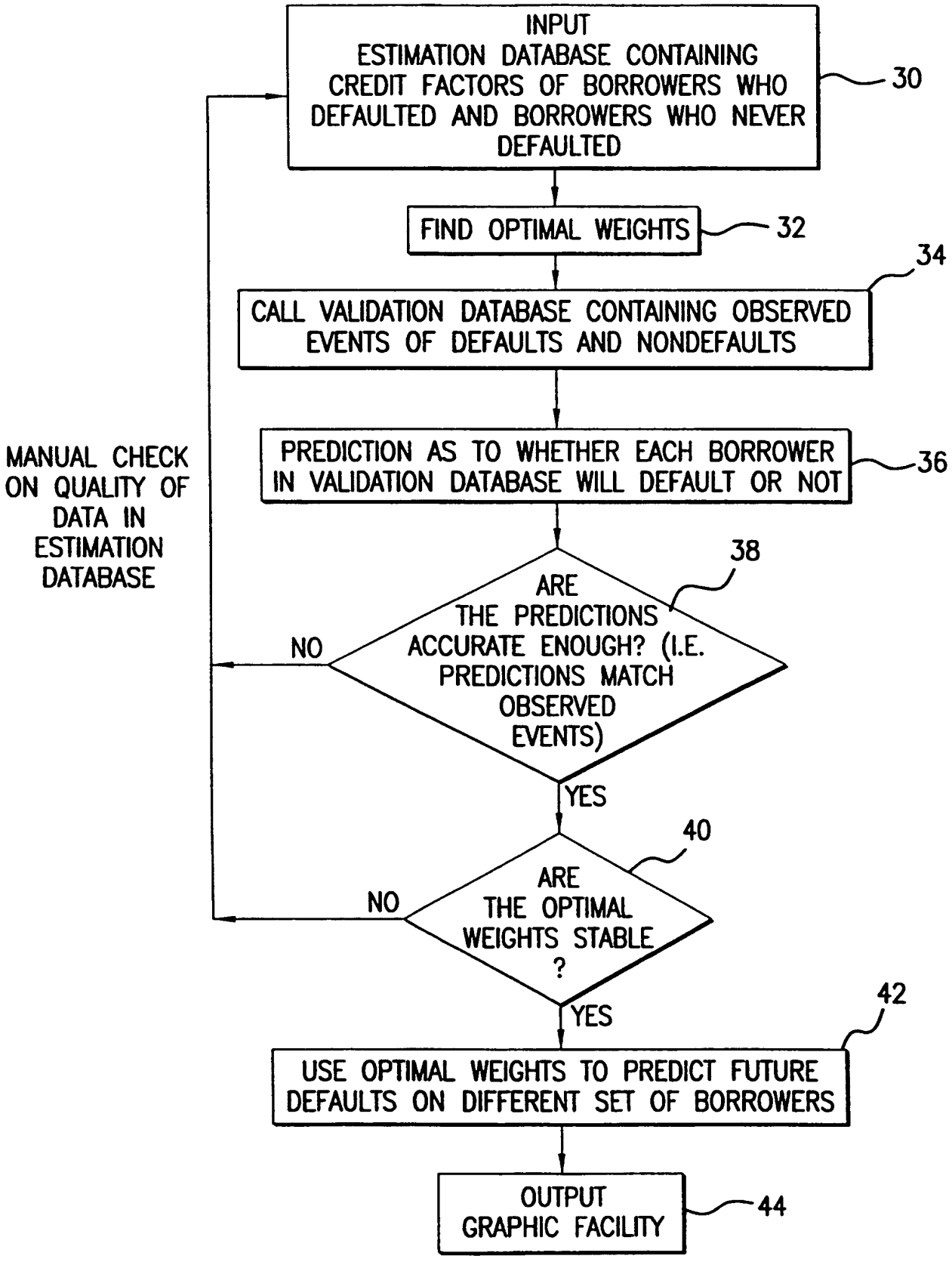

INPUT ESTIMATION DATABASE CONTAINING CREDIT FACTORS OF BORROWERS WHO DEFAULTED AND BORROWERS WHO NEVER DEFAULTED
30
FIND OPTIMAL WEIGHTS
32
34
CALL VALIDATION DATABASE CONTAINING OBSERVED EVENTS OF DEFAULTS AND NONDEFAULTS
PREDICTION AS TO WHETHER EACH BORROWER IN VALIDATION DATABASE WILL DEFAULT OR NOT
36
MANUAL CHECK ON QUALITY OF DATA IN ESTIMATION DATABASE
38
ARE THE PREDICTIONS ACCURATE ENOUGH? (I.E. PREDICTIONS MATCH OBSERVED EVENTS)
NO
YES
40
ARE THE OPTIMAL WEIGHTS STABLE ?
NO
YES
42
USE OPTIMAL WEIGHTS TO PREDICT FUTURE DEFAULTS ON DIFFERENT SET OF BORROWERS
OUTPUT GRAPHIC FACILITY
44

FIG.4

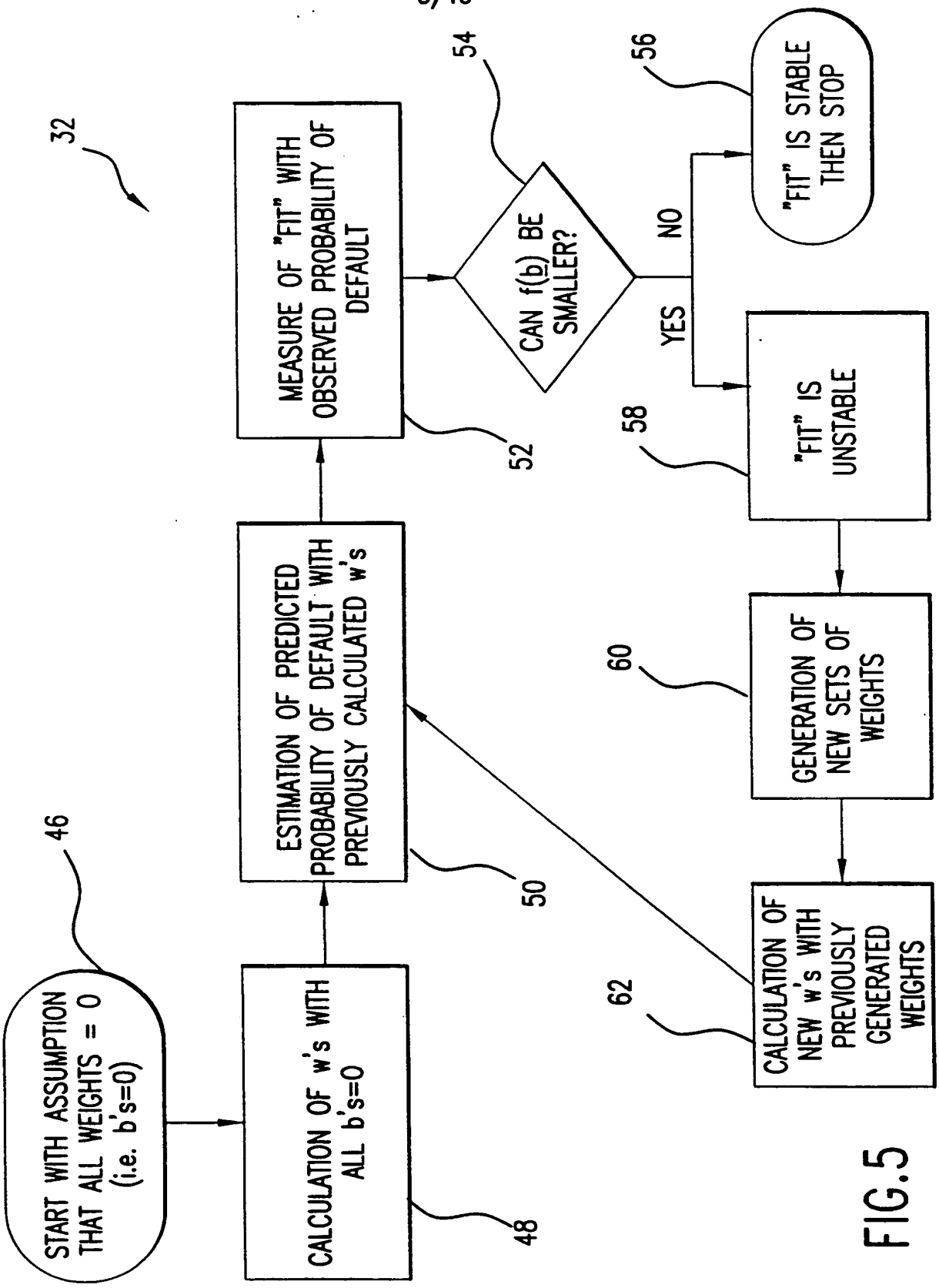

START WITH ASSUMPTION THAT ALL WEIGHTS = 0 (i.e. b's=0)
46
CALCULATION OF w's WITH ALL b's=0
48
ESTIMATION OF PREDICTED PROBABILITY OF DEFAULT WITH PREVIOUSLY CALCULATED w's
50
MEASURE OF "FIT" WITH OBSERVED PROBABILITY OF DEFAULT
52
CAN f(b) BE SMALLER?
54
YES
NO
"FIT" IS UNSTABLE
58
"FIT" IS STABLE THEN STOP
56
GENERATION OF NEW SETS OF WEIGHTS
60
CALCULATION OF NEW w's WITH PREVIOUSLY GENERATED WEIGHTS
62
32

FIG.5

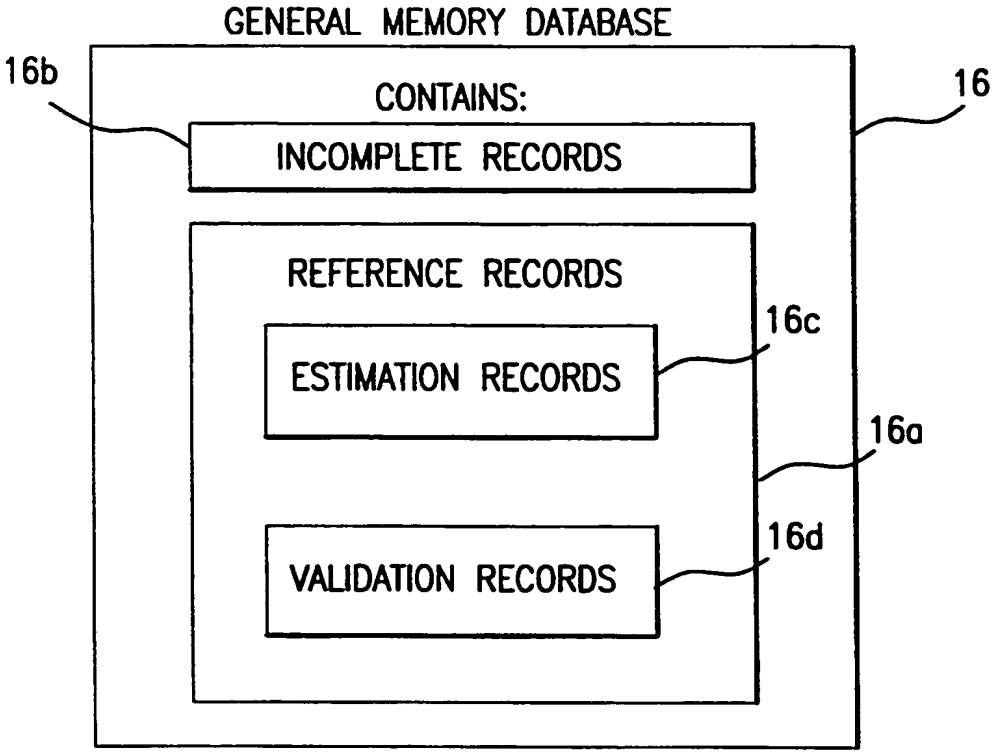

GENERAL MEMORY DATABASE
16b
CONTAINS:
16
INCOMPLETE RECORDS
REFERENCE RECORDS
16c
ESTIMATION RECORDS
16a
16d
VALIDATION RECORDS

FIG.6

SUBSTITUTE SHEET (RULE 26)

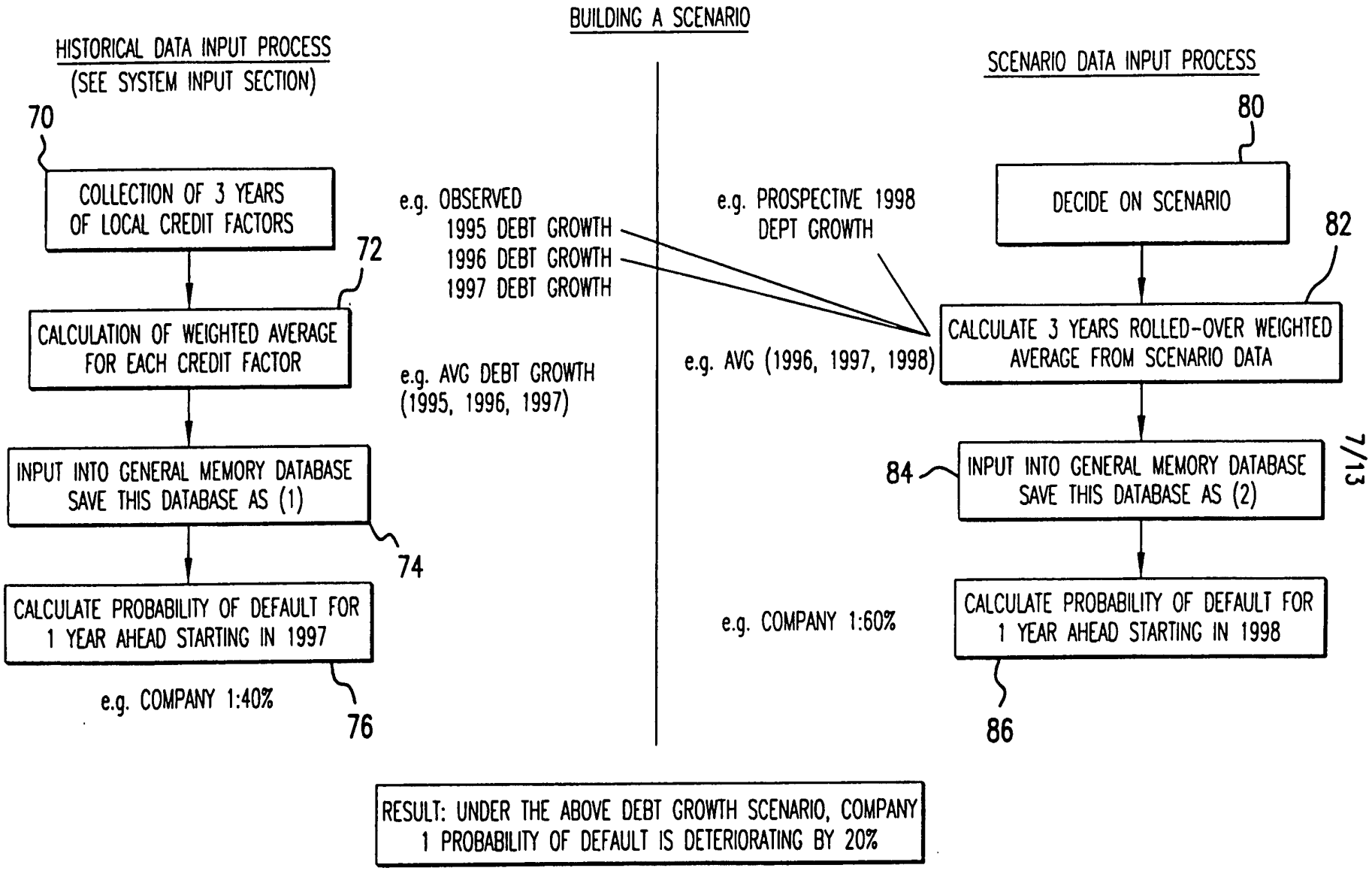


FIG.7

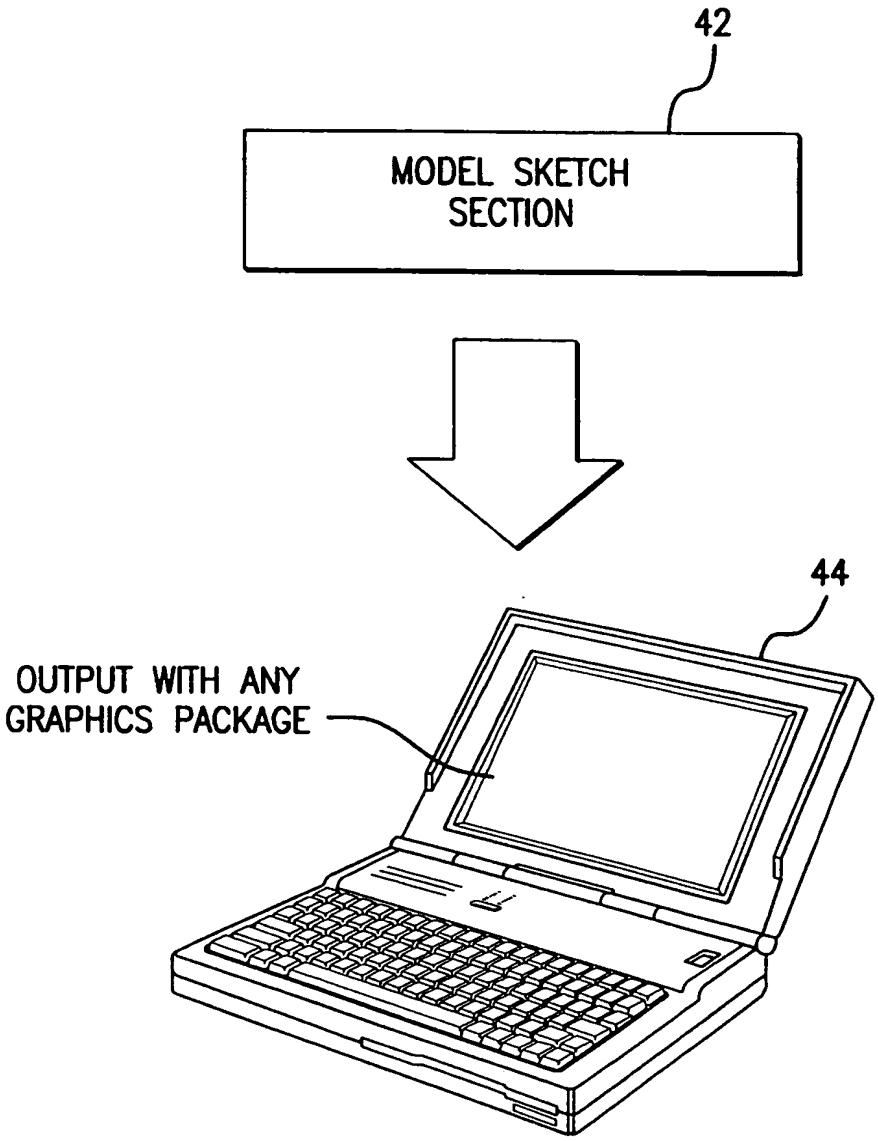

42
MODEL SKETCH SECTION
44
OUTPUT WITH ANY GRAPHICS PACKAGE

FIG.8

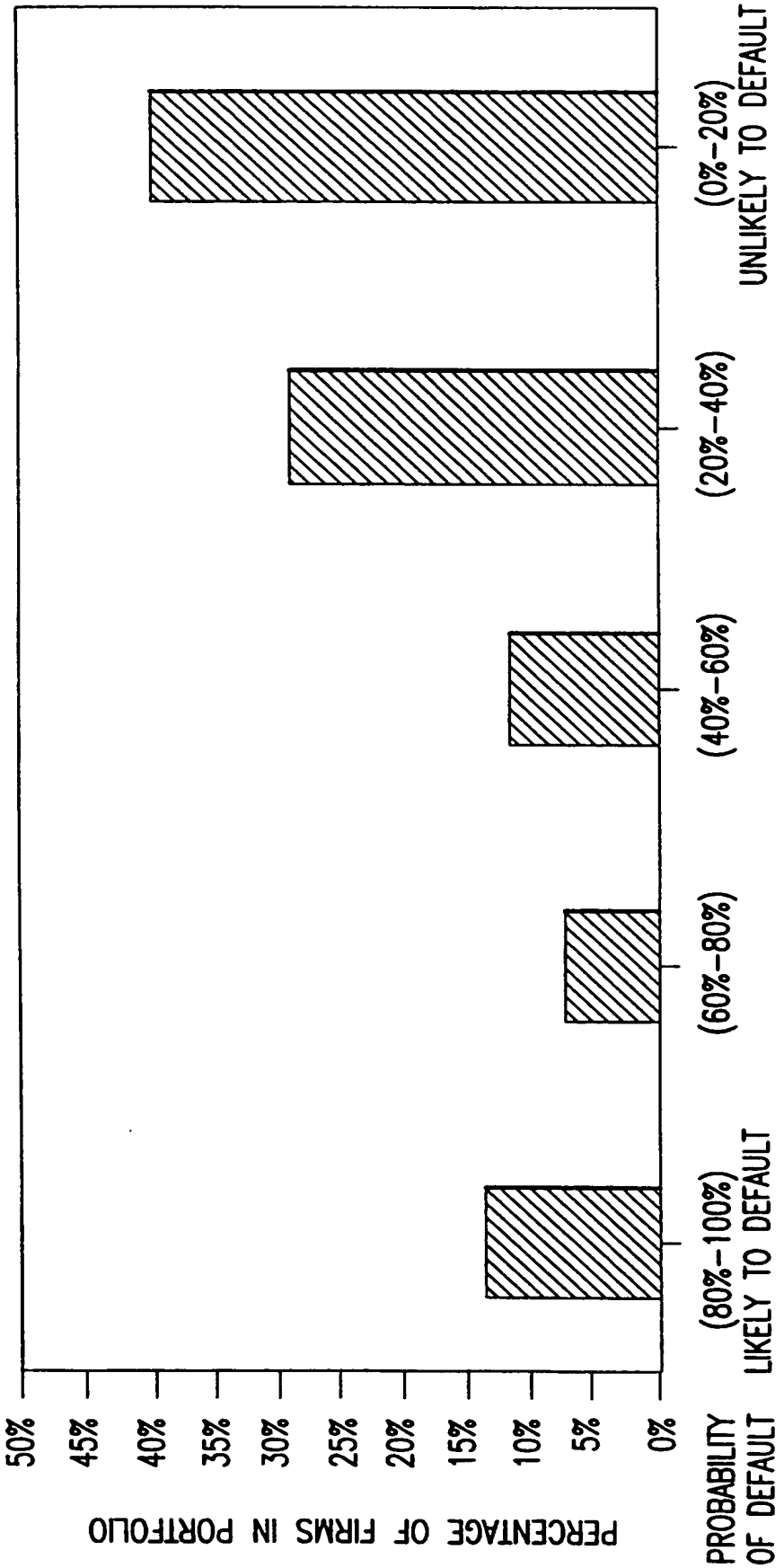
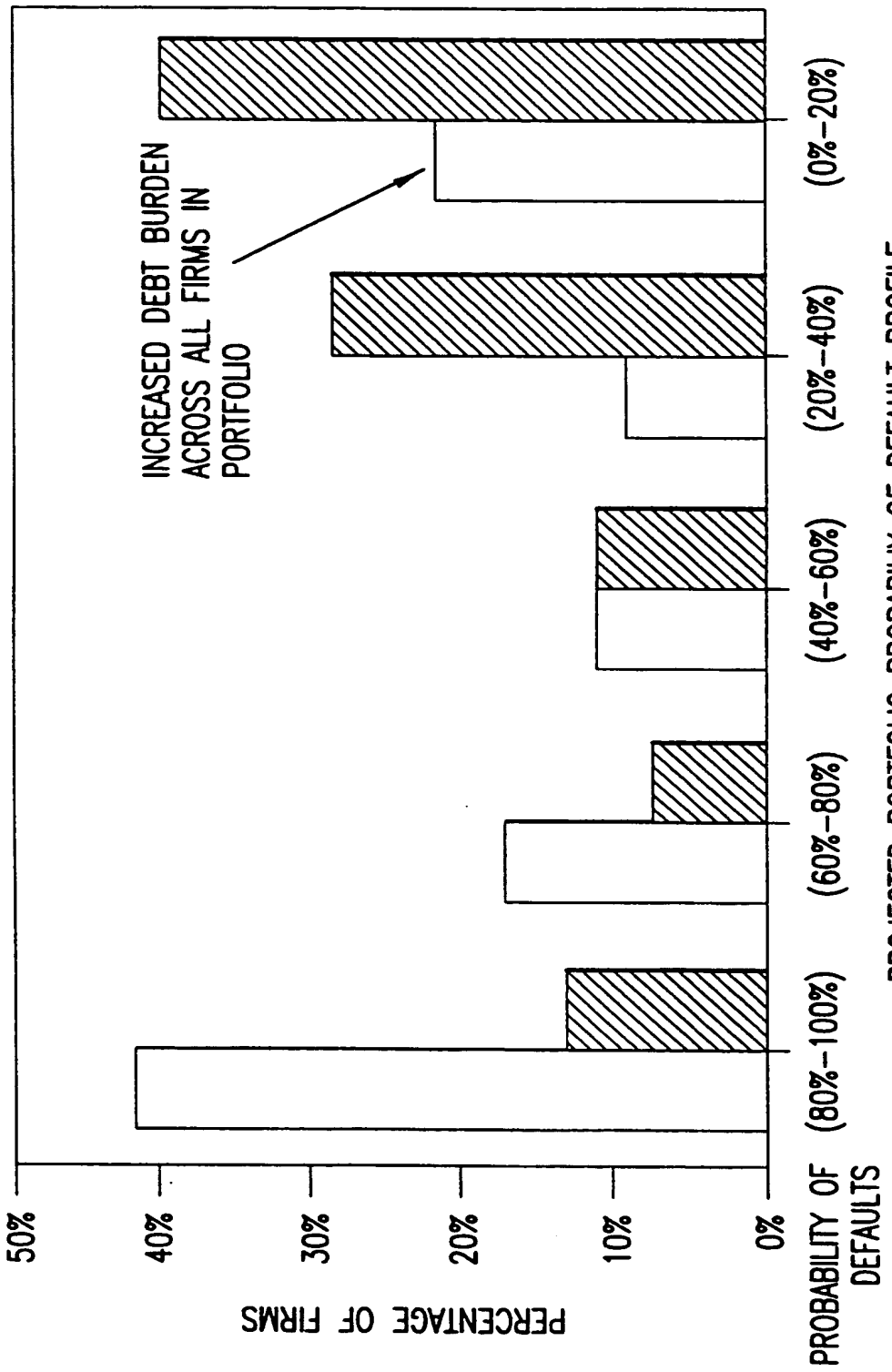
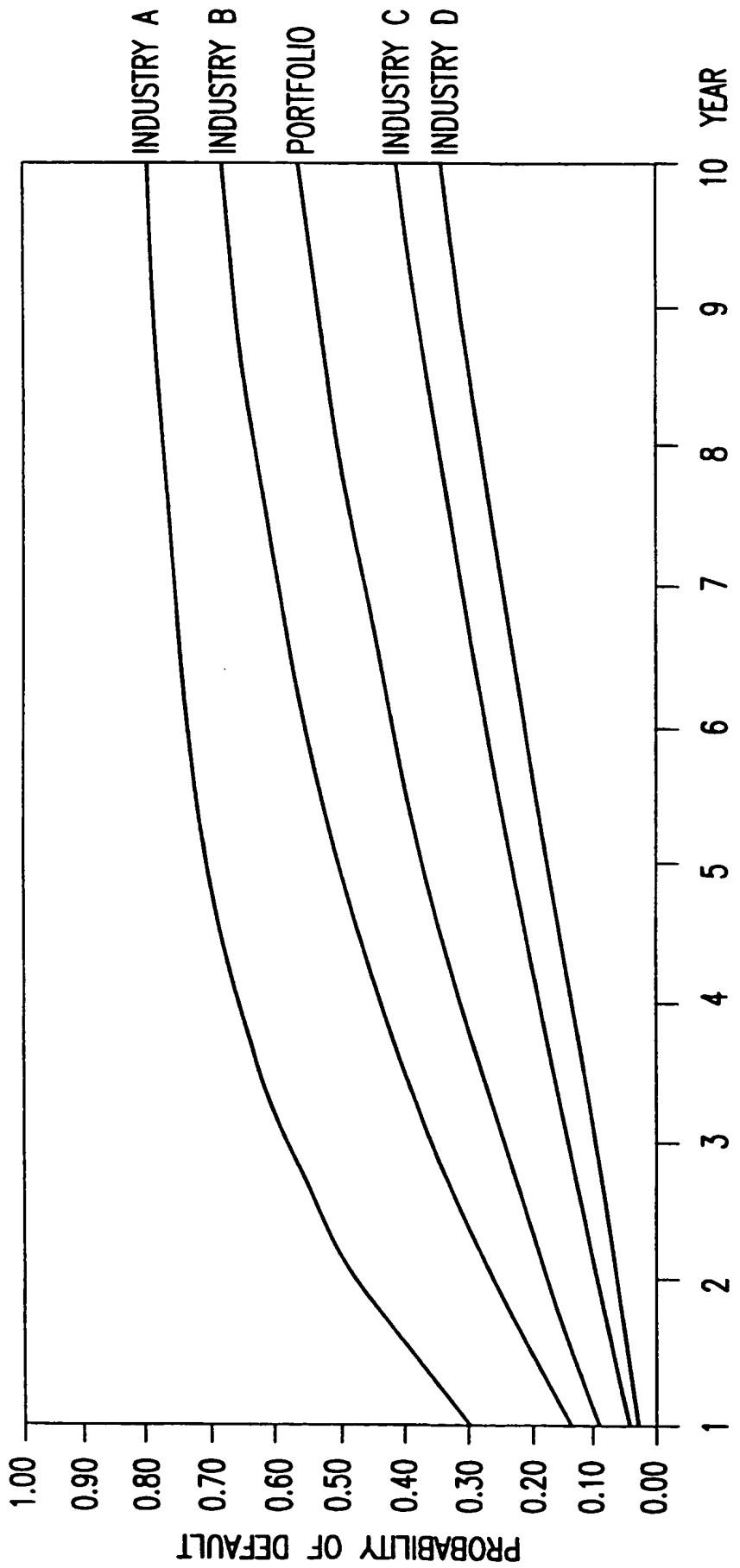

PERCENTAGE OF FIRMS IN PORTFOLIO
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
PROBABILITY OF DEFAULT
(80%–100%) LIKELY TO DEFAULT
(60%–80%)
(40%–60%)
(20%–40%)
(0%–20%) UNLIKELY TO DEFAULT
CURRENT PORTFOLIO PROBABILITY OF DEFAULT PORTFOLIO

FIG.9



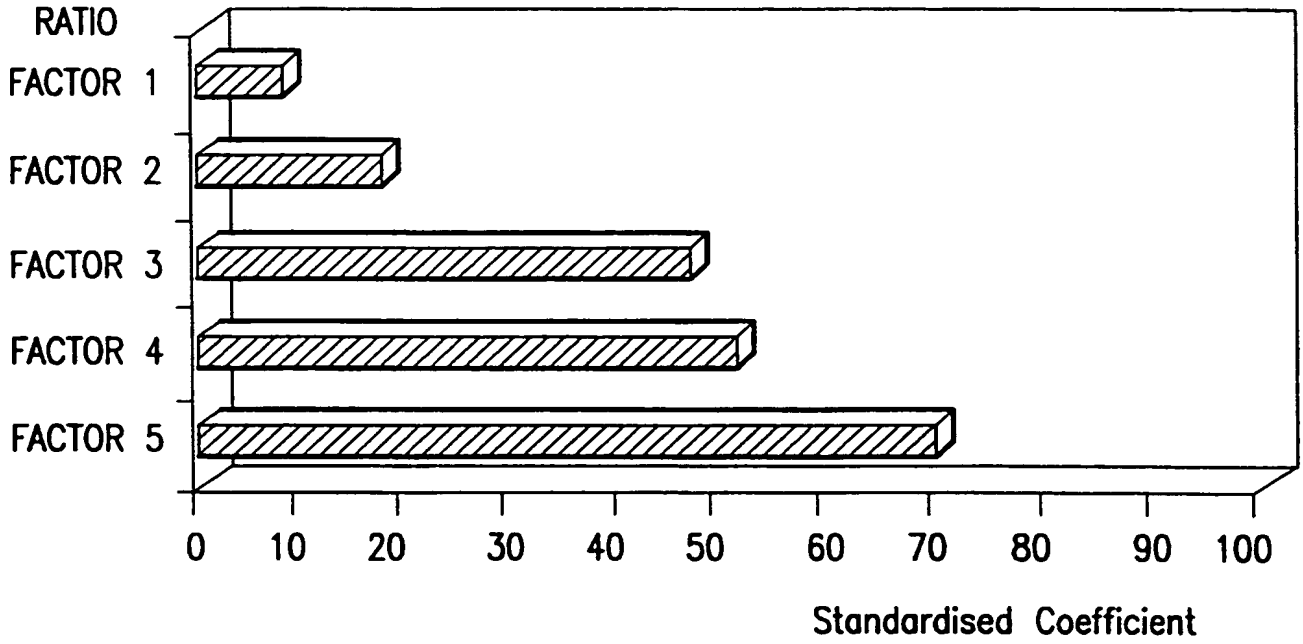
PROJECTED PORTFOLIO PROBABILIY OF DEFAULT PROFILE
Scenario: Increased Debt Burden

FIG.10



FUTURE EVOLUTION OF PROBABILITIES OF DEFAULT

FIG.11



PORTFOLIO FACTOR SIGNIFICANCE

FIG.12

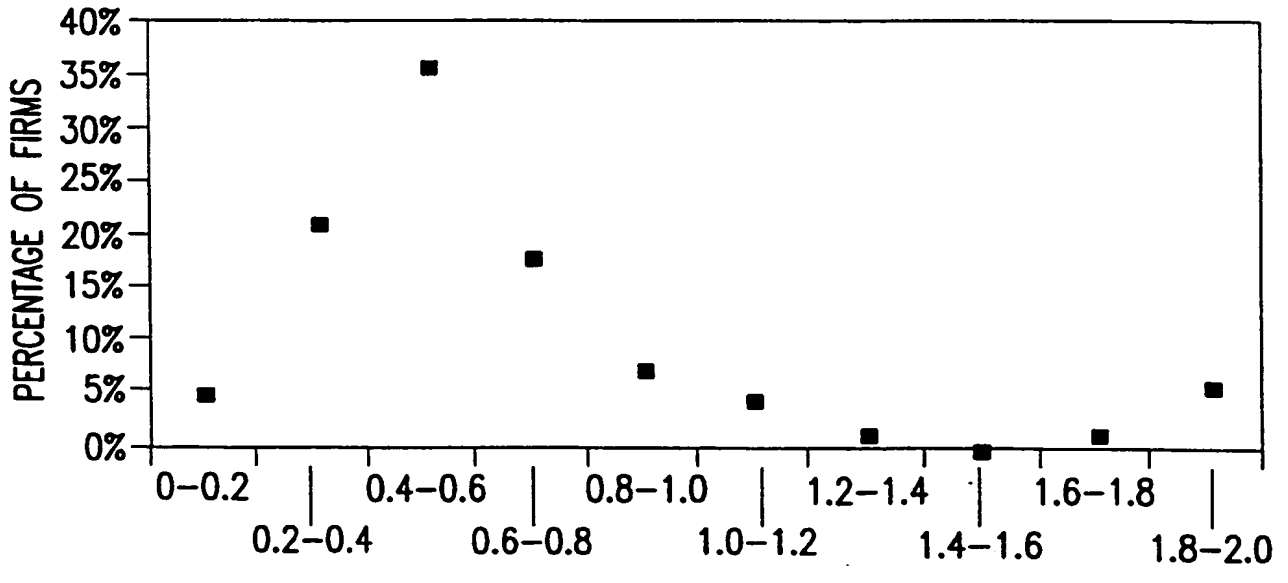


FIG.13

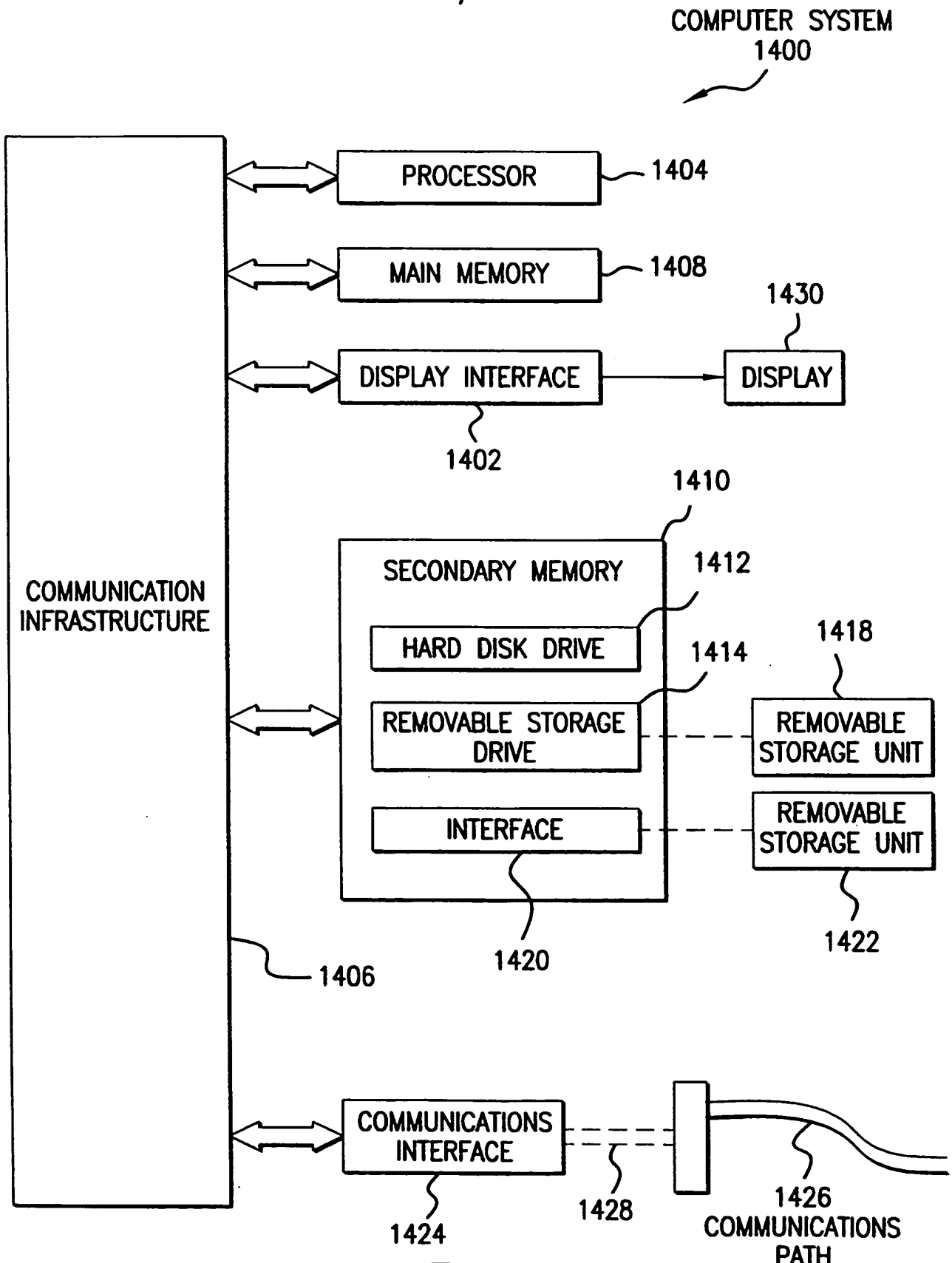

COMPUTER SYSTEM
1400
PROCESSOR
1404
MAIN MEMORY
1408
1430
DISPLAY INTERFACE
DISPLAY
1402
1410
SECONDARY MEMORY
1412
COMMUNICATION INFRASTRUCTURE
HARD DISK DRIVE
1418
1414
REMOVABLE STORAGE DRIVE
REMOVABLE STORAGE UNIT
INTERFACE
REMOVABLE STORAGE UNIT
1420
1422
1406
COMMUNICATIONS INTERFACE
1424
1428
1426
COMMUNICATIONS PATH

FIG.14